



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/822,831	04/02/2001	George Zheng Chen	P 0280083 PJS/ALP/P8339US	8466
7590 09/17/2004 Pillsbury Winthrop LLP 1600 Tysons Boulevard MCLEAN, VA 22102			EXAMINER CREPEAU, JONATHAN	
			ART UNIT 1746	PAPER NUMBER
DATE MAILED: 09/17/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/822,831

Applicant(s)

CHEN ET AL.

Examiner

Jonathan S. Crepeau

Art Unit

1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2004.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 and 26 is/are pending in the application.
4a) Of the above claim(s) 1-16 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 17-24 and 26 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This Office action addresses claims 1-24 and 26. Claims 1-16 remain withdrawn from consideration as being drawn to a non-elected invention. Claims 17-24 and 26 remain rejected for the reasons of record. Accordingly, this action is made final.

Claim Rejections - 35 USC § 102

2. Claims 17-24 and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Niu (U.S. Patent 6,205,016). Regarding claims 17-19 and 26, the reference is directed to an electrochemical capacitor comprising two composite electrodes, each consisting of carbon nanotubes and a conductive polymer (see col. 6, lines 47-50; col. 7, lines 11-15; col. 8, lines 17-21). Regarding claims 18, 19, and 26, conducting members are in contact with the composites (see Fig. 1). An electrolyte separates the first and second electrodes (see col. 9, lines 37-47). Regarding claim 20, the electrically conductive polymers are selected from polyaniline, polypyrrole, polythiophene, and their derivatives (see col. 9, line 5). Regarding claims 21 and 22, the nanotubes may be non-ionized or negatively ionized (i.e., oxidized; see col. 14, lines 32-42). Regarding claim 23, the composites are in the form of "thin films" on the conducting members (see col. 9, lines 10-15). Regarding claim 24, the capacitor comprises a cylindrical shape with an insulating member between the rolled electrodes (see col. 11, lines 23-36). Regarding claims 17, 18, and 26, the reference teaches that the nanotubes may be dispersed in

the conductive polymer when the nanotube content is low (see col. 9, line 53). Although the reference does not teach the process limitations recited in claims 17, 18, and 26, the patentability of a product does not depend on its method of production. If the product in a product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Additionally, once a rationale is provided tending to show that the claimed product appears to be the same or similar to that of the prior art, although produced by a different process, the burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983). See also MPEP §2113. Accordingly, as the claimed product appears to be substantially identical to the product of the reference, the instant claims are not considered to be distinguished over the reference.

Response to Arguments

3. Applicant's arguments and exhibits filed June 29, 2004 have been fully considered but they are not persuasive. Applicants have synthesized samples according to the claimed invention which have polypyrrole:nanotube ratios of 18:1 and 142:1, and samples according to the process of Niu having polypyrrole:nanotube ratios of 1:1 and 12.5:1. While the photographs do indeed appear to show that Niu's product has a different structure than the claimed product, it is submitted that a product of Niu should be synthesized having a very high polypyrrole:nanotube

ratio, e.g., over 100:1, to correspond with the results shown for the claimed product. It is believed that the central issue herein is showing that the process of Niu is *not capable* of producing the claimed product, at *any* weight ratio. It is acknowledged that Niu's process does not appear to produce the claimed product at a weight ratio of 12.5:1. However, it is respectfully submitted that a much higher ratio would still need to be shown in order to eliminate the possibility of identical products at such high ratios. The Examiner recognizes that Applicants have made good-faith efforts to address the issues in this case, and such efforts are appreciated. However, as noted above, it is believed that the possibility of having identical structures at very high weight ratios still has not been eliminated, and as such, the outstanding rejection is maintained.

Conclusion

4. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 1746


however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Crepeau whose telephone number is (571) 272-1299.

The examiner can normally be reached Monday-Friday from 9:30 AM - 6:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr, can be reached at (571) 272-1414. The phone number for the organization where this application or proceeding is assigned is (571) 272-1700. Documents may be faxed to the central fax server at (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jonathan Crepeau
Patent Examiner
Art Unit 1746
September 16, 2004